

CLAIMS

What is claimed is:

*Sub
B1*

1. A method for providing user interfaces in a first network including first devices interconnected via a communication medium and at least one interface device connecting said first network to at least a second network having interconnected second devices, the user interfaces for controlling the devices that are currently connected to the first network and devices that are currently connected to the second network, comprising the steps of:
 - (a) obtaining information from said first devices currently connected to the first network, said information including device information;
 - 10 (b) obtaining information from the interface device about the second devices connected to the second network;
 - (c) generating a user interface description in one or more of said first devices based at least on the obtained information, the user interface description in each first device including: (1) at least one reference associated with the device information of each of said first devices, and (2) at least one reference associated with the device information of each of said second devices.
- 15 2. The method of claim 1, wherein said interface device includes information about the second devices.
3. The method of claim 1, wherein the first network comprises a 1394 bus, and the second network comprises a non-1394 bus.

4. The method of claim 3, wherein the interface device includes an address extension table for the second devices, and wherein step (b) further includes the steps of using the address extension table to access said second devices.

5. The method of claim 1, wherein the interface device comprises a bridge device.

6. The method of claim 1 further including the step of:

B1
5 (d) displaying one or more user interfaces each based on one of said one or more user interface descriptions, on one or more devices connected to the first network capable of displaying a user interface, for user control of said first and second devices.

7. The method of claim 6, wherein the step of displaying each user interface further includes the steps of:

5 using each reference in the corresponding user interface description to access the associated information in each device;

generating the user interface including device data corresponding to each device using the accessed information in each device; and

10 displaying the user interface on said device capable of displaying a user interface.

8. The method of claim 1, wherein the step of generating a user interface description further comprises the steps of: associating a hyper-text link with the device information of one or more of said first and second devices.

9. The method of claim 1, wherein the device information in each device includes a user control interface description for user interaction with the device.

B1 10. The method of claim 9, wherein the step (c) further includes the steps of generating each user interface description such that each reference in that user interface description is to at least the user control interface description in each corresponding device.

method 11. A network system for performing a service, comprising:

a first network including first devices interconnected via a communication medium and at least one interface device connecting said first network to at least a second network having interconnected second devices;

an agent in each of one or more first devices adapter for:

obtaining information from said first devices currently connected to the first network, said information including device information;

obtaining information from the interface device about the second devices connected to the second network;

generating a user interface description in one or more of said first devices based at least on the obtained information, the user interface description in each first device including: (1) at least one reference associated with the device information of each of said first devices, and (2) at least one reference associated with the device information of each of said second devices.

00000000000000000000000000000000
12. The system of claim 1, wherein said interface device includes information about the second devices.

13. The system of claim 1, wherein the first network comprises a 1394 bus, and the second network comprises a non-1394 bus.

14. The system of claim 3, wherein the interface device includes an address extension table for the second devices, and wherein each agent is further adapted for using the address extension table to access said second devices.

15. The system of claim 1, wherein the interface device comprises a bridge device.

16. The system of claim 1 wherein the agent is further adapted for displaying one or more user interfaces each based on one of said one or more user interface descriptions, on one or more devices connected to the first network capable of displaying a user interface, for user control of said first and second devices.

17. The system of claim 6, wherein the agent is further adapted for displaying each user interface by:

5 using each reference in the corresponding user interface description to access the associated information in each device;

generating the user interface including device data corresponding to each device using the accessed information in each device; and

10 displaying the user interface on said device capable of displaying a user interface.

18. The system of claim 1, wherein the agent is further adapted for generating each user interface description by: associating a hyper-text link with the device information of one or more of said first and second devices.

19. The system of claim 1, wherein the device information in each device includes a user control interface description for user interaction with the device.

20. The system of claim 9, wherein the agent is further adapted for generating each user interface description such that each reference in that user interface description is to at least the user control interface description in each corresponding device.

Add
B2

00000000000000000000000000000000